

## What is Claimed is:

[c1] 1.A method for automatically configuring a protocol line trace filter, comprising the steps of:  
initializing an idle pattern check;  
identifying an idle pattern within a received data frame;  
filling an idle pattern check buffer with the idle pattern;  
receiving a data frame into a receive buffer;  
determining whether the receive buffer matches the idle pattern check buffer;  
and  
outputting the receive buffer for tracing only if it is determined that the receive buffer does not match the idle pattern check buffer.

[c2] 2.The method of claim 1, wherein the step of initializing an idle pattern check, further comprises the steps of:  
filling the idle pattern check buffer with a default idle pattern; and  
setting a flag to false.

[c3] 3.The method of claim 2, further comprising the steps of:  
filling an idle pattern buffer with the idle pattern;  
determining whether the flag is set to false; and  
filling the idle pattern check buffer with the idle pattern buffer and setting the flag to true if it is determined that the flag is set to false.

[c4] 4.The method of claim 1, wherein the step of initializing the idle pattern check is performed periodically.

[c5] 5. The method of claim 1, wherein the step of initializing the idle pattern check is performed daily.

[c6] 6.A method for automatically configuring a protocol line trace filter, comprising the steps of:  
filling the idle pattern check buffer with a default idle pattern;  
setting a flag to false;  
identifying an idle pattern within a received data frame;  
filling an idle pattern buffer with the idle pattern;

determining whether the flag is set to false;  
filling the idle pattern check buffer with the idle pattern buffer and setting the flag to true if it is determined that the flag is set to false.

[c7] 7. The method of claim 6, further comprising the steps of:  
receiving a data frame into a receive buffer;  
determining whether the receive buffer matches the idle pattern check buffer;  
and  
outputting the receive buffer for tracing only if it is determined that the receive buffer does not match the idle pattern check buffer.

[c8] 8. A system for automatically configuring a protocol line trace filter, comprising:  
means for initializing an idle pattern check;  
means for identifying an idle pattern within a received data frame;  
means for filling an idle pattern check buffer with the idle pattern;  
means for receiving a data frame into a receive buffer;  
means for determining whether the receive buffer matches the idle pattern check buffer; and  
means for outputting the receive buffer for tracing only if it is determined that the receive buffer does not match the idle pattern check buffer.

[c9] 9. The system of claim 8, wherein the means for initializing an idle pattern check, further comprise:  
means for filling the idle pattern check buffer with a default idle pattern; and  
means for setting a flag to false.

[c10] 10. The system of claim 9, further comprising:  
means for filling an idle pattern buffer with the idle pattern;  
means for determining whether the flag is set to false; and  
means for filling the idle pattern check buffer with the idle pattern buffer and setting the flag to true if it is determined that the flag is set to false.

[c11] 11. The system of claim 8, further comprising means for periodically initializing the idle pattern check.

[c12] 12. The method of claim 8, further comprising means for daily initializing the

idle pattern check.

[c13] 13. A system for automatically configuring a protocol line trace filter, comprising:  
means for filling the idle pattern check buffer with a default idle pattern;  
means for setting a flag to false;  
means for identifying an idle pattern within a received data frame;  
means for filling an idle pattern buffer with the idle pattern;  
means for determining whether the flag is set to false;  
means for filling the idle pattern check buffer with the idle pattern buffer and setting the flag to true if it is determined that the flag is set to false.

[c14] 14. The system of claim 13, further comprising:  
means for receiving a data frame into a receive buffer;  
means for determining whether the receive buffer matches the idle pattern check buffer; and  
means for outputting the receive buffer for tracing only if it is determined that the receive buffer does not match the idle pattern check buffer.

[c15] 15. A computer readable medium incorporating instructions for automatically configuring a protocol line trace filter, the instructions comprising:  
one or more instructions for initializing an idle pattern check;  
one or more instructions for identifying an idle pattern within a received data frame;  
one or more instructions for filling an idle pattern check buffer with the idle pattern;  
one or more instructions for receiving a data frame into a receive buffer;  
one or more instructions for determining whether the receive buffer matches the idle pattern check buffer; and  
one or more instructions for outputting the receive buffer for tracing only if it is determined that the receive buffer does not match the idle pattern check buffer.

[c16] 16. The computer readable medium of claim 15, wherein the one or more instructions for initializing an idle pattern check, further comprise:  
one or more instructions for filling the idle pattern check buffer with a default

idle pattern; and  
one or more instructions for setting a flag to false.

[c17] 17. The computer readable medium of claim 16, further comprising:  
one or more instructions for filling an idle pattern buffer with the idle pattern;  
one or more instructions for determining whether the flag is set to false; and  
one or more instructions for filling the idle pattern check buffer with the idle pattern buffer and setting the flag to true if it is determined that the flag is set to false.

[c18] 18. The computer readable medium of claim 15, wherein the one or more instructions for initializing the idle pattern check is performed periodically.

[c19] 19. The computer readable medium of claim 15, wherein the one or more instructions for initializing the idle pattern check is performed daily.

[c20] 20. A computer readable medium incorporating instructions for automatically configuring a protocol line trace filter, the instructions comprising:  
one or more instructions for filling the idle pattern check buffer with a default idle pattern;  
one or more instructions for setting a flag to false;  
one or more instructions for identifying an idle pattern within a received data frame;  
one or more instructions for filling an idle pattern buffer with the idle pattern;  
one or more instructions for determining whether the flag is set to false;  
one or more instructions for filling the idle pattern check buffer with the idle pattern buffer and setting the flag to true if it is determined that the flag is set to false.

[c21] 21. The computer readable medium of claim 20, further comprising:  
one or more instructions for receiving a data frame into a receive buffer;  
one or more instructions for determining whether the receive buffer matches the idle pattern check buffer; and  
one or more instructions for outputting the receive buffer for tracing only if it is determined that the receive buffer does not match the idle pattern check buffer.